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EXAMINER

AKERS, GEOFFREY R

ART UNIT	PAPER NUMBER
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3624

DATE MAILED: 02/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<h1>Office Action Summary</h1>	Application 09/425362	Applicant(s) Tomoyuki	
	Examiner Ales, G	Art Unit 3624	Confirmation No.

- The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address -

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☒ Responsive to communication(s) filed on 12/11/02
- ☒ This action is **FINAL**. ☐ This action is non-final.
- ☐ Since this application is in condition for allowance except for the formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 19-22, 24, 26-60 is/are pending in this application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 19-22, 24, 26-60 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved or ☐ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action.
- ☐ The drawing(s) filed on _____ is/are ☐ accepted or ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d) or (f).
- ☐ All ☐ Some* ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. _____.
- ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- *Certified copies not received:

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- ☐ The translation of the foreign language provisional application has been received.

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s) _____
- ☐ Notice of References Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

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DETAILED ACTION

Response to Amendment

1. This action is issued in response to applicant's Amendment E(Paper #22) filed 12/11/02.
2. New claims 46-60 were added. No claims were deleted. None were amended.
3. Claims 19-22,24,26-60 are pending.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 27,29-31,36-37,42-43 are rejected under 35 USC 103(a) as unpatentable over Halpern(US Pat. No: 4,906,828) in view of Takeuchi(US Pat. No: 4,963,722) in view of Kolls(US Pat. No: 5,637,845)(1995) and further in view of Los Angeles Times, August 9, 1993, col 1B 5 pl Perlman, J. "Transportation: Promoters Hope Advertizing and Marketing Gimmicks will Steer Freeway Drivers to the Region's First Pay as You Go Highway"(hereinafter referred to as "LA").
6. As per claim 27 Halpern teaches an IC card according to claim 25, further comprising: a connector which inputs/outputs electric money data from/to an external terminal in said electric purse loan system(Fig. 10)(col 10 lines 19-53). Halpern teaches using an IC card having a balance information storage which stores electronic money information representing a

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balance(col 14 lines 6-17). Takeuchi teaches loan information storage which stores information representing a loan comprising an IC card reader/writer which reads information stored in said IC card and writes information to the IC card and a processor(col 3 lines 4-49)(col 3 line 65-col 4 line 2). Halpern teaches changing balances in debiting and crediting operations when a commercial transaction is made subtracts an amount of money to be paid for said commercial transaction from said balance information storage(col 14 lines 6-17).LA teaches wherein said IC card reader/writer writes information representing a loan into said loan information storage when said electronic money information representing a balance in less than said amount of money to be paid of the commercial transaction(page 2). Takeuchi teaches wherein said processor checks said information representing a loan stored in said IC card and inhibits the commercial transaction if the amount of money to be paid for it is greater than a predetermined amount of money(col 3 lines 4-49)(col 3 line 65-col 4 line 2).LA teaches that prepaid accounts are allowed to carry negative balances for motorists on the freeway.Furthermore,Kolls teaches that prepaid cards can be smart cards(col 5 lines 13-17)(col 2 lines 24-39)(col 2 lines 56-65). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Takeuchi and further in view of Kolls and LA to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

7. As per claim 29 Halpern teaches an IC card according to claim 25, wherein said transaction is includes debiting transactions(col 3 line 9-12). Halpern teaches using an IC card having a balance information storage which stores electronic money information representing a balance(col 14

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lines 6-17). Takeuchi teaches loan information storage which stores information representing a loan comprising an IC card reader/writer which reads information stored in said IC card and writes information to the IC card and a processor(col 3 lines 4-49)(col 3 line 65-col 4 line 2). Halpern teaches changing balances in debiting and crediting operations when a commercial transaction is made subtracts an amount of money to be paid for said commercial transaction from said balance information storage(col 14 lines 6-17).LA teaches wherein said IC card reader/writer writes information representing a loan into said loan information storage when said electronic money information representing a balance in less than said amount of money to be paid of the commercial transaction(page 2). Takeuchi teaches wherein said processor checks said information representing a loan stored in said IC card and inhibits the commercial transaction if the amount of money to be paid for it is greater than a predetermined amount of money(col 3 lines 4-49)(col 3 line 65-col 4 line 2).LA teaches that prepaid accounts are allowed to carry negative balances for motorists on the freeway.Furthermore,Kolls teaches that prepaid cards can be smart cards(col 5 lines 13-17)(col 2 lines 24-39)(col 2 lines 56-65). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Takeuchi and further in view of Kolls and LA to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

8. As per claim 30 Halpern teaches an IC card according to claim 25, wherein said electronic data of a loan includes electronic money information representing the upper limit of a loan(col 13 lines 14-30)(Fig 11).Takeuchi also teaches this (col 3 lines 4-49). Halpern further teaches using

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an IC card having a balance information storage which stores electronic money information representing a balance(col 14 lines 6-17). Takeuchi teaches loan information storage which stores information representing a loan comprising an IC card reader/writer which reads information stored in said IC card and writes information to the IC card and a processor(col 3 lines 4-49)(col 3 line 65-col 4 line 2). Halpern teaches changing balances in debiting and crediting operations when a commercial transaction is made subtracts an amount of money to be paid for said commercial transaction from said balance information storage(col 14 lines 6-17).LA teaches wherein said IC card reader/writer writes information representing a loan into said loan information storage when said electronic money information representing a balance in less than said amount of money to be paid of the commercial transaction(page 2). Takeuchi teaches wherein said processor checks said information representing a loan stored in said IC card and inhibits the commercial transaction if the amount of money to be paid for it is greater than a predetermined amount of money(col 3 lines 4-49)(col 3 line 65-col 4 line 2).LA teaches that prepaid accounts are allowed to carry negative balances for motorists on the freeway.Furthermore,Kolls teaches that prepaid cards can be smart cards(col 5 lines 13-17)(col 2 lines 24-39)(col 2 lines 56-65). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Takeuchi and further in view of Kolls and LA to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

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9. As per claim 31 Halpern teaches an IC card according to claim 25, wherein said electronic data of a loan includes electronic money information representing the upper limit of a loan(col 13 lines 14-30)(Fig 11).Takeuchi also teaches this (col 3 lines 4-49). Halpern teaches using an IC card having a balance information storage which stores electronic money information representing a balance(col 14 lines 6-17). Takeuchi teaches loan information storage which stores information representing a loan comprising an IC card reader/writer which reads information stored in said IC card and writes information to the IC card and a processor(col 3 lines 4-49)(col 3 line 65-col 4 line 2). Halpern teaches changing balances in debiting and crediting operations when a commercial transaction is made subtracts an amount of money to be paid for said commercial transaction from said balance information storage(col 14 lines 6-17).LA teaches wherein said IC card reader/writer writes information representing a loan into said loan information storage when said electronic money information representing a balance in less than said amount of money to be paid of the commercial transaction(page 2). Takeuchi teaches wherein said processor checks said information representing a loan stored in said IC card and inhibits the commercial transaction if the amount of money to be paid for it is greater than a predetermined amount of money(col 3 lines 4-49)(col 3 line 65-col 4 line 2).LA teaches that prepaid accounts are allowed to carry negative balances for motorists on the freeway.Furthermore,Kolls teaches that prepaid cards can be smart cards(col 5 lines 13-17)(col 2 lines 24-39)(col 2 lines 56-65). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata in view of Takeuchi and further in view of

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Kolls and LA to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

10. As per claims 36,46,51,56 Halpern teaches an IC card used in an electronic purse loan system, comprising a balance memory which stores electronic data representing a money balance(col 14 lines 6-17). Takeuchi teaches a loan memory which stores electronic data of a loan and a processor which writes electronic data of a loan into said loan memory when said electronic data representing a money balance is less than the amount of money required for a transaction(col 3 lines 4-49)(col 3 line 65-col 4 line 2).Halpern teaches changing balances in debiting and crediting operations(col 14 lines 6-17). Halpern teaches using an IC card having a balance information storage which stores electronic money information representing a balance(col 14 lines 6-17). Takeuchi teaches loan information storage which stores information representing a loan comprising an IC card reader/writer which reads information stored in said IC card and writes information to the IC card and a processor(col 3 lines 4-49)(col 3 line 65-col 4 line 2). Halpern teaches changing balances in debiting and crediting operations when a commercial transaction is made subtracts an amount of money to be paid for said commercial transaction from said balance information storage(col 14 lines 6-17).LA teaches wherein said IC card reader/writer writes information representing a loan into said loan information storage when said electronic money information representing a balance is less than said amount of money to be paid of the commercial transaction(page 2). Takeuchi teaches wherein said processor checks said information representing a loan stored in said IC card and inhibits the commercial

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transaction if the amount of money to be paid for it is greater than a predetermined amount of money(col 3 lines 4-49)(col 3 line 65-col 4 line 2).LA teaches that prepaid accounts are allowed to carry negative balances for motorists on the freeway.LA teaches a term/loan limits by notification to the commuters regarding negative balances(page 2). Furthermore,Kolls teaches that prepaid cards can be smart cards(col 5 lines 13-17)(col 2 lines 24-39)(col 2 lines 56-65). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata in view of Takeuchi and further in view of Kolls and LA to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

12. As per claim 42 Halpern teaches an IC card according to claim 31, further comprising: a connector which inputs/outputs electric money data from/to an external terminal in said electric purse loan system(Fig. 10)(col 10 lines 19-53).

13. As per claims 43,48,53,58 Halpern teaches an IC card according to claims 31, 46,51,56 respectively further comprising wherein electronic data representing money is input from and output from/to an external terminal to a data input/output circuit in an IC card(Fig. 10)(col 10 lines 19-53).Furthermore,Kolls teaches that prepaid cards can be smart cards(col 5 lines 13-17)(col 2 lines 24-39)(col 2 lines 56-65). LA teaches that prepaid accounts are allowed to carry negative balances for motorists on the freeway through prepaid cards(page 2). These crediting operations may represent loans being made.It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Takeuchi in view of Kolls and further in

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view of LA to teach the above in the lending operation. The motivation for this is to describe a loan transaction process for implementation on IC cards which permits the storage of excess spending (overdrafts) and equivalently, loans.

14. Claims 37,47,52,57 are rejected under 35 USC 103(a) as unpatentable over Halpern (US Pat. No: 4,906,828) in view of Nagata (US Pat. No: 5,140,517) in view of Takeuchi (US Pat. No: 4,963,722) in view of Kolls (US Pat. No: 5,637,845) (1995) in view of Los Angeles Times, August 9, 1993, col 1B 5 pl Perlman, J. "Transportation: Promoters Hope Advertizing and Marketing Gimmicks will Steer Freeway Drivers to the Region's First Pay as You Go Highway" (hereinafter referred to as "LA") and further in view of Gaumet (US Pat. No: 5,640,306).

15. As per claims 37,47,52,57 Halpern teaches an IC card according to claims 36,46,51,56 respectively further comprising wherein electronic data representing money is input from and output from/to an external terminal to a data input/output circuit in an IC card (Fig. 10) (col 10 lines 19-53). Gaumet teaches a contactless smart card (Abstract) (col 1 lines 5-40).

Furthermore, Kolls teaches that prepaid cards can be smart cards (col 5 lines 13-17) (col 2 lines 24-39) (col 2 lines 56-65). LA teaches that prepaid accounts are allowed to carry negative balances for motorists on the freeway through prepaid cards (page 2). These crediting operations may represent loans being made. It would have been obvious to one skilled in the art at the time of the

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invention to combine Halpern in view of Takeuchi and further in view of Kolls and further in view of LA to teach the above in the lending operation. The motivation for this is to describe a loan transaction process for implementation on IC cards which permits the storage of excess spending (overdrafts) and equivalently, loans.

16. Claims 19-21, 24, 28, 32-35, 39, 41, 44-45 are rejected under 35 USC 103(a) as unpatentable over Halpern (US Pat. No: 4,906,828) in view of Nagata (US Pat. No: 5,140,517) in view of Takeuchi (US Pat. No: 4,963,722) in view of Kolls (US Pat. No: 5,637,845) (1995) and further in view of Los Angeles Times, August 9, 1993, col 1B 5 pl Perlman, J. "Transportation: Promoters Hope Advertising and Marketing Gimmicks will Steer Freeway Drivers to the Region's First Pay as You Go Highway" (hereinafter referred to as "LA").

17 As per claims 19, 49, 54, 59 Halpern teaches an electronic purse loan device according to claims 20, 46, 52, 56 respectively wherein said processor checks whether or not said IC card is registered (col 3 line 59-col 4 line 2) (col 10 lines 49-54). Nagata teaches an ID number memory which stores the ID number registered for a person (col 6 lines 13-25). LA teaches the pre-paid account card carries a negative balance utilized on the LA transportation system since August, 1993, which will act as a credit card for the consumer allowing a commuter without sufficient funds to carry a negative balance. The card will show a negative balance and when the commuter later adds fare the negative balance held in smart card memory will be deducted from new monetary additions. These crediting operations may represent loans being

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made. Furthermore, Kolls teaches that prepaid cards can be smart cards (col 5 lines 13-17) (col 2 lines 24-39) (col 2 lines 56-65). LA teaches that prepaid accounts are allowed to carry negative balances for motorists on the freeway. The motivation for this is to describe a loan transaction process for implementation on IC cards which permits the storage of negative values, and equivalently, loans. These crediting operations may represent loans being made. It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata in view of Takeuchi and further in view of Kolls and LA to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

18. As per claim 20 Halpern teaches an electronic purse device. Halpern teaches using an IC card having a balance information storage which stores electronic money information representing a balance (col 14 lines 6-17). Nagata teaches an ID number memory which stores the ID number registered for a person (col 6 lines 13-25). Takeuchi teaches loan information storage which stores information representing a loan comprising an IC card reader/writer which reads information stored in said IC card and writes information to the IC card and a processor (col 3 lines 4-49) (col 3 line 65-col 4 line 2). Halpern teaches changing balances in debiting and crediting operations when a commercial transaction is made subtracts an amount of money to be paid for said commercial transaction from said balance information storage (col 14 lines 6-17). LA teaches wherein said IC card reader/writer writes information representing a loan into said loan information storage when said electronic money information representing a balance in less than

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said amount of money to be paid of the commercial transaction(page 2). Takeuchi teaches wherein said processor checks said information representing a loan stored in said IC card and inhibits the commercial transaction if the amount of money to be paid for it is greater than a predetermined amount of money(col 3 lines 4-49)(col 3 line 65-col 4 line 2).LA teaches that prepaid accounts are allowed to carry negative balances for motorists on the freeway.Furthermore,Kolls teaches that prepaid cards can be smart cards(col 5 lines 13-17)(col 2 lines 24-39)(col 2 lines 56-65). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata in view of Takeuchi and further in view of Kolls and LA to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

19. As per claim 21 Halpern teaches an electronic purse device.Takeuchi teaches wherein said processor checks said information representing a loan stored in said IC card and inhibits a loan if the amount of money to be paid is greater than a predetermined amount of money(col 3 lines 4-49)(col 3 line 65-col 4 line 2). Halpern teaches using an IC card having a balance information storage which stores electronic money information representing a balance(col 14 lines 6-17). Nagata teaches an ID number memory which stores the ID number registered for a person(col 6 lines 13-25). Takeuchi teaches loan information storage which stores information representing a loan comprising an IC card reader/writer which reads information stored in said IC card and writes information to the IC card and a processor(col 3 lines 4-49)(col 3 line 65-col 4 line 2). Halpern teaches changing balances in debiting and crediting operations when a commercial

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transaction is made subtracts an amount of money to be paid for said commercial transaction from said balance information storage(col 14 lines 6-17).LA teaches wherein said IC card reader/writer writes information representing a loan into said loan information storage when said electronic money information representing a balance is less than said amount of money to be paid of the commercial transaction(page 2). Takeuchi teaches wherein said processor checks said information representing a loan stored in said IC card and inhibits the commercial transaction if the amount of money to be paid for it is greater than a predetermined amount of money(col 3 lines 4-49)(col 3 line 65-col 4 line 2).LA teaches that prepaid accounts are allowed to carry negative balances for motorists on the freeway.Furthermore,Kolls teaches that prepaid cards can be smart cards(col 5 lines 13-17)(col 2 lines 24-39)(col 2 lines 56-65). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata in view of Takeuchi and further in view of Kolls and LA to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

20. As per claim 24 Halpern teaches an electronic purse device according to claim 20. Takeuchi teaches a device further comprising a display which displays information indicating that said electronic money information representing a balance is less than said amount of money to be paid for said commercial transaction(Fig 2)(col 3 lines 4-49)(col 3 line 65-col 4 line 2).Nagata teaches an ID number memory which stores the ID number registered for a person(col 6 lines 13-25). Takeuchi also teaches loan information storage which stores information representing a loan

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comprising an IC card reader/writer which reads information stored in said IC card and writes information to the IC card and a processor(col 3 lines 4-49)(col 3 line 65-col 4 line 2). Halpern teaches changing balances in debiting and crediting operations when a commercial transaction is made subtracts an amount of money to be paid for said commercial transaction from said balance information storage(col 14 lines 6-17).LA teaches wherein said IC card reader/writer writes information representing a loan into said loan information storage when said electronic money information representing a balance in less than said amount of money to be paid of the commercial transaction(page 2). Takeuchi teaches wherein said processor checks said information representing a loan stored in said IC card and inhibits the commercial transaction if the amount of money to be paid for it is greater than a predetermined amount of money(col 3 lines 4-49)(col 3 line 65-col 4 line 2).LA teaches that prepaid accounts are allowed to carry negative balances for motorists on the freeway.Furthermore,Kolls teaches that prepaid cards can be smart cards(col 5 lines 13-17)(col 2 lines 24-39)(col 2 lines 56-65). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata in view of Takeuchi and further in view of Kolls and LA to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

21. As per claim 28 Halpern teaches an IC card according to claim 30, further comprising: register information as card serial number and operations data for a person(col 3 line 59-col 4 line 9).Nagata teaches an ID number memory which stores the ID number registered for a

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person(col 6 lines 13-25). Halpern teaches using an IC card having a balance information storage which stores electronic money information representing a balance(col 14 lines 6-17). Takeuchi teaches loan information storage which stores information representing a loan comprising an IC card reader/writer which reads information stored in said IC card and writes information to the IC card and a processor(col 3 lines 4-49)(col 3 line 65-col 4 line 2). Halpern teaches changing balances in debiting and crediting operations when a commercial transaction is made subtracts an amount of money to be paid for said commercial transaction from said balance information storage(col 14 lines 6-17).LA teaches wherein said IC card reader/writer writes information representing a loan into said loan information storage when said electronic money information representing a balance in less than said amount of money to be paid of the commercial transaction(page 2). Takeuchi teaches wherein said processor checks said information representing a loan stored in said IC card and inhibits the commercial transaction if the amount of money to be paid for it is greater than a predetermined amount of money(col 3 lines 4-49)(col 3 line 65-col 4 line 2).LA teaches that prepaid accounts are allowed to carry negative balances for motorists on the freeway.Furthermore,Kolls teaches that prepaid cards can be smart cards(col 5 lines 13-17)(col 2 lines 24-39)(col 2 lines 56-65). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata in view of Takeuchi and further in view of Kolls and LA to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

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22. As per claim 32 Halpern teaches an electronic purse system(col 1 line 33-col 2 line 2) using an IC card having a balance information storage which stores electronic information representing a money balance(col 1 lines 48-51). Takeuchi teaches a loan information storage which stores information representing a loan(col 3 lines 4-49). Halpern teaches a system comprising: (a) a terminal (col 1 lines 52-53)(col 1 line 66-col 2 line 2) an IC card reader/writer which reads information stored in said IC card and writes information to said IC card(Fig 5). Nagata teaches a processor which, when a commercial transaction is made, subtracts an amount of money(Fig 8B/554) to be paid for said commercial transaction from said balance information storage.

Takeuchi teaches a center having a storage which stores money information and loan information transmitted from said terminal, wherein said terminal writes electronic information of a loan into said loan information storage and transmits loan information corresponding to said loan to said center when said electronic information representing a money balance is less than the amount of money to be paid for said commercial transaction(col 3 lines 4-49)(col 3 line 65-col 4 line

23). Halpern teaches using an IC card having a balance information storage which stores electronic money information representing a balance(col 14 lines 6-17). Takeuchi teaches loan information storage which stores information representing a loan comprising an IC card reader/writer which reads information stored in said IC card and writes information to the IC card and a processor(col 3 lines 4-49)(col 3 line 65-col 4 line 2). Halpern teaches changing balances in debiting and crediting operations when a commercial transaction is made subtracts an amount of money to be paid for said commercial transaction from said balance information storage(col 14

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lines 6-17).LA teaches wherein said IC card reader/writer writes information representing a loan into said loan information storage when said electronic money information representing a balance in less than said amount of money to be paid of the commercial transaction(page 2).

Takeuchi teaches wherein said processor checks said information representing a loan stored in said IC card and inhibits the commercial transaction if the amount of money to be paid for it is greater than a predetermined amount of money(col 3 lines 4-49)(col 3 line 65-col 4 line 2).LA teaches that prepaid accounts are allowed to carry negative balances for motorists on the freeway.Furthermore,Kolls teaches that prepaid cards can be smart cards(col 5 lines 13-17)(col 2 lines 24-39)(col 2 lines 56-65). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata in view of Takeuchi and further in view of Kolls and LA to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

23. As per claim 33 Halpern teaches according to claim 32. Halpern does not specifically teach an electronic purse loan device wherein said processor liquidates a loan when the next commercial transaction occurs. Nagata teaches this(col 9 lines 39-58)(Fig. 8B/S55/S56).Halpern teaches using an IC card having a balance information storage which stores electronic money information representing a balance(col 14 lines 6-17). Takeuchi teaches loan information storage which stores information representing a loan comprising an IC card reader/writer which reads information stored in said IC card and writes information to the IC card and a processor(col 3 lines 4-49)(col 3 line 65-col 4 line 2). Halpern teaches changing balances in debiting and

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crediting operations when a commercial transaction is made subtracts an amount of money to be paid for said commercial transaction from said balance information storage(col 14 lines 6-17).LA teaches wherein said IC card reader/writer writes information representing a loan into said loan information storage when said electronic money information representing a balance in less than said amount of money to be paid of the commercial transaction(page 2). Takeuchi teaches wherein said processor checks said information representing a loan stored in said IC card and inhibits the commercial transaction if the amount of money to be paid for it is greater than a predetermined amount of money(col 3 lines 4-49)(col 3 line 65-col 4 line 2).LA teaches that prepaid accounts are allowed to carry negative balances for motorists on the freeway.Furthermore,Kolls teaches that prepaid cards can be smart cards(col 5 lines 13-17)(col 2 lines 24-39)(col 2 lines 56-65). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata in view of Takeuchi and further in view of Kolls and LA to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

24. As per claim 34 Halpern teaches an electronic purse system according to claim 32, wherein said electronic data of funds including electronic money information on the upper limit (col 13 lines 14-30)(Fig. 11). Takeuchi teaches an overdraft(loan) mechanism(col 3 lines 4-49)(col 3 line 65-col 4 line 2).Nagata teaches an ID number memory which stores the ID number registered for a person(col 6 lines 13-25). Halpern teaches using an IC card having a balance information storage which stores electronic money information representing a balance(col 14 lines 6-17).

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Takeuchi teaches loan information storage which stores information representing a loan comprising an IC card reader/writer which reads information stored in said IC card and writes information to the IC card and a processor(col 3 lines 4-49)(col 3 line 65-col 4 line 2). Halpern teaches changing balances in debiting and crediting operations when a commercial transaction is made subtracts an amount of money to be paid for said commercial transaction from said balance information storage(col 14 lines 6-17).LA teaches wherein said IC card reader/writer writes information representing a loan into said loan information storage when said electronic money information representing a balance in less than said amount of money to be paid of the commercial transaction(page 2). Takeuchi teaches wherein said processor checks said information representing a loan stored in said IC card and inhibits the commercial transaction if the amount of money to be paid for it is greater than a predetermined amount of money(col 3 lines 4-49)(col 3 line 65-col 4 line 2).LA teaches that prepaid accounts are allowed to carry negative balances for motorists on the freeway.Furthermore,Kolls teaches that prepaid cards can be smart cards(col 5 lines 13-17)(col 2 lines 24-39)(col 2 lines 56-65). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata in view of Takeuchi and further in view of Kolls and LA to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

25. As per claim 35 Halpern teaches an electronic purse loan system according to claim 32 further comprising a center processor in said center, wherein said center processor checks said

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information representing a loan and approves a loan when said information is within a predetermined upper limit(col 13 lines 14-30)(Fig 11).Nagata teaches an ID number memory which stores the ID number registered for a person(col 6 lines 13-25). Halpern teaches using an IC card having a balance information storage which stores electronic money information representing a balance(col 14 lines 6-17). Takeuchi teaches loan information storage which stores information representing a loan comprising an IC card reader/writer which reads information stored in said IC card and writes information to the IC card and a processor(col 3 lines 4-49)(col 3 line 65-col 4 line 2). Halpern teaches changing balances in debiting and crediting operations when a commercial transaction is made subtracts an amount of money to be paid for said commercial transaction from said balance information storage(col 14 lines 6-17).LA teaches wherein said IC card reader/writer writes information representing a loan into said loan information storage when said electronic money information representing a balance in less than said amount of money to be paid of the commercial transaction(page 2). Takeuchi teaches wherein said processor checks said information representing a loan stored in said IC card and inhibits the commercial transaction if the amount of money to be paid for it is greater than a predetermined amount of money(col 3 lines 4-49)(col 3 line 65-col 4 line 2).LA teaches that prepaid accounts are allowed to carry negative balances for motorists on the freeway.Furthermore,Kolls teaches that prepaid cards can be smart cards(col 5 lines 13-17)(col 2 lines 24-39)(col 2 lines 56-65). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata in view of Takeuchi and further in view of

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Kolls and LA to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

26 As per claim 39 Halpern teaches an electronic purse loan device according to claim 20, wherein said processor checks whether or not said IC card is registered(col 3 line 59-col 4 line 2)(col 10 lines 49-54).

27. As per claim 41 Halpern teaches an electronic purse device according to claim 20. Takeuchi teaches a device further comprising a display which displays information indicating that said electronic money information representing a balance is less than said amount of money to be paid for said commercial transaction(Fig 2)(col 3 lines 4-49)(col 3 line 65-col 4 line 2).

28. As per claim 44 Halpern teaches an electric purse device accordiung to claim 20. Halpern does not specifically teach an ID number memory which stores the ID number registered for a person. Nagata teaches an ID number memory which stores the ID number registered for a person(col 6 lines 13-25).It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata in view of Takeuchi and further in view of Kolls and LA to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

X 28. As per claims 45,50,55,60 Halpern teaches an electric purse device according to claims 20, 46,51,56.LA teaches the pre-paid account card carries a negative balance utilized on the LA transportation system since August, 1993, which will act as a credit card for the consumer allowing a commuter without sufficient funds to carry a negative balance. The card will show a

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negative balance and when the commuter later adds fare the negative balance held in smart card memory will be deducted from new monetary additions. These crediting operations may represent loans being made. Furthermore, Kolls teaches that prepaid cards can be smart cards (col 5 lines 13-17) (col 2 lines 24-39) (col 2 lines 56-65). LA teaches that prepaid accounts are allowed to carry negative balances for motorists on the freeway. It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata in view of Takeuchi and further in view of Kolls and LA to teach the above and to specifically apply these techniques to trains and buses. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans on train/bus systems.

29. Claims 22, 40 is rejected under 35 USC 103(a) as unpatentable over Halpern (US Pat. No: 4,906,828) in view of Nagata (US Pat. No: 5,140,517) in view of Gaumet (US Pat. No: 5,640,306) and further in view of Kolls (US Pat. No: 5,637,845) as well as Los Angeles Times, August 9, 1993, col 1B 5 pl Perlman, J. "Transportation: Promotors Hope Advertizing and Marketing Gimmicks will Steer Freeway Drivers to the Region's First Pay as You Go Highway" (hereinafter referred to as "LA").

30. As per claim 22 Halpern teaches an electronic purse loan device according to claim 20. Halpern does not specifically teach wherein said IC card reader/writer reads from/writes to the information stored in said IC card. Nagata teaches this (Fig. 5/15/10/1/14/24) (col 7 line 63-col 8 line 64). Nagata fails to teach without contacting said IC card. Gaumet teaches reading/writing

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information in an IC card without contact(col 1 line 1-col 2 line 6). Halpern teaches using an IC card having a balance information storage which stores electronic money information representing a balance(col 14 lines 6-17). Halpern teaches changing balances in debiting and crediting operations when a commercial transaction is made subtracts an amount of money to be paid for said commercial transaction from said balance information storage(col 14 lines 6-17).LA teaches wherein said IC card reader/writer writes information representing a loan into said loan information storage when said electronic money information representing a balance in less than said amount of money to be paid of the commercial transaction(page 2). Takeuchi teaches wherein said processor checks said information representing a loan stored in said IC card and inhibits the commercial transaction if the amount of money to be paid for it is greater than a predetermined amount of money(col 3 lines 4-49)(col 3 line 65-col 4 line 2).LA teaches that prepaid accounts are allowed to carry negative balances for motorists on the freeway.Furthermore,Kolls teaches that prepaid cards can be smart cards(col 5 lines 13-17)(col 2 lines 24-39)(col 2 lines 56-65). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata in view of Gaumet and further in view of Kolls and LA to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions employed without contacting the IC card.

31 As per claim 40 Halpern teaches an electronic purse loan device according to claim 20.

Halpern does not specifically teach wherein said IC card reader/writer reads from/writes to the information stored in said IC card. Nagata teaches this(Fig. 5/15/10/1/14/24)(col 7 line 63-col 8

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line 64). Nagata fails to teach without contacting said IC card. Gaumet teaches reading/writing information in an IC card without contact(col 1 line 1-col 2 line 6). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata in view of Gaumet and further in view of Kolls and LA to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions employed without contacting the IC card.

32. Claims 26 and 38 are rejected under 35 USC 103(a) as unpatentable over Halpern(US Pat. No: 4,906,828) and further in view of Gaumet(US Pat. No: 5,640,306) in view of Kolls(US Pat. No: 5,637,845) as well as Los Angeles Times, August 9, 1993, col 1B 5 pl Perlman, J.

“Transportation: Promotors Hope Advertizing and Marketing Gimmicks will Steer Freeway Drivers to the Region’s First Pay as You Go Highway”(hereinafter referred to as “LA”).

33. As per claim 26 Halpern teaches an IC card according to claim 30, further comprising: a data input/output circuit which inputs/outputs electronic data representing money from/to an external terminal in an electric purse loan system(Fig 2). Halpern fails to teach I/O communication with the IC card without contact. Gaumet teaches reading/writing information in an IC card without contact(Abstract)(col 1 line 1-col 2 line 6). Halpern teaches using an IC card having a balance information storage which stores electronic money information representing a balance(col 14 lines 6-17). Halpern teaches changing balances in debiting and crediting operations when a commercial transaction is made subtracts an amount of money to be paid for said commercial

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transaction from said balance information storage(col 14 lines 6-17).LA teaches wherein said IC card reader/writer writes information representing a loan into said loan information storage when said electronic money information representing a balance in less than said amount of money to be paid of the commercial transaction(page 2).LA teaches that prepaid accounts are allowed to carry negative balances for motorists on the freeway.Furthermore,Kolls teaches that prepaid cards can be smart cards(col 5 lines 13-17)(col 2 lines 24-39)(col 2 lines 56-65). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Gaumet and further in view of Kolls and LA to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

34. As per claim 38 Halpern teaches an IC card according to claim 36, further comprising: a data input/output circuit which inputs/outputs electronic data representing money from/to an external terminal in an electric purse loan system(Fig 2). Halpern fails to teach I/O communication with the IC card without contact. Gaumet teaches reading/writing information in an IC card without contact(Abstract)(col 1 line 1-col 2 line 6). Halpern also teaches using an IC card having a balance information storage which stores electronic money information representing a balance(col 14 lines 6-17). Halpern teaches changing balances in debiting and crediting operations when a commercial transaction is made subtracts an amount of money to be paid for said commercial transaction from said balance information storage(col 14 lines 6-17).LA teaches wherein said IC card reader/writer writes information representing a loan into said loan information storage when said electronic money information representing a balance in less than

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said amount of money to be paid of the commercial transaction(page 2).LA teaches that prepaid accounts are allowed to carry negative balances for motorists on the freeway.Furthermore,Kolls teaches that prepaid cards can be smart cards(col 5 lines 13-17)(col 2 lines 24-39)(col 2 lines 56-65). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Gaumet and further in view of Kolls and LA to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

Response to Arguments

35. Applicant's arguments with respect to the claims have been considered but are not persuasive.All references predate applicant's claim of a priority date of August, 1995.The LA times newspaper predates applicant's invention and incorporates its features directly in the carrying of a negative(loop) balance on a prepaid card(page 2). Kolls teaches that prepaid cards can be smart cards(col 5 lines 13-17)(col 2 lines 24-39)(col 2 lines 56-65). The application of the smart card to toll roads in the transportation sector, is also directly applicable to any intended use including buses or trains also in this transportation sector.Gaumet teaches a contactless smart card. Remaining references to the claims are directly addressed in the citations prior.

Conclusion

36. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Comments regarding this communication should be addressed to the examiner, Dr. Geoffrey Akers, P.E. who can be reached at (703)-306-5844 between the hours of 6:30 AM and 5:00 PM Monday through Friday. If attempts to contact the examiner are unsuccessful, the examiner's superior, Mr. Vincent Millin, SPE, may be telephoned at (703)-308-1065.

GRA

February 20, 2003

